

## ABSTRACT OF THE DISCLOSURE

The gray axis of an input apparatus is shifted so as to match the gray axis of an output apparatus. Each data on a plane of equal lightness located in the Gamut of the input apparatus is shifted in the same direction in accordance with the shift of the gray axis by an amount of shifting smaller in proportion to greater distance from the gray axis. Therefore, the image is not governed by the chromaticness in the shifting direction even if the gray axis is shifted. Points located outside the Gamut of the output apparatus is compressed-converted into points within the Gamut (surface) where color difference is minimized while maintaining the lightness. A desired image is reproduced without inversion in the lightness after Gamut compression between data.